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A REMINDER

If you fail to return the card enclosed in the March issue of MINERAL INFORMATION SERVICE it will be necessary to remove your name from the mailing list. If you have mailed it, thank you for your cooperation.

MINING AND INDUSTRIAL NEWS NOTES

Mineral Commodity Conservation in Los Angeles County

As a result of the current smog abatement program in Los Angeles County, sulfur is being recovered in the form of 160 tons of hydrogen sulfide per day from several petroleum refineries, according to information recently received from the Air Pollution Control District. This was formerly a loss to the atmosphere of 320 tons of sulfur dioxide per day and represents 77 percent of the former total emission from such sources. The hydrogen sulfide is sold to three chemical companies, two of which purchase a total of 70 tons per day and convert it to 200 tons of sulfuric acid. The third plant, built since the start of the Air Pollution Control District operations at a cost of $1,000,000, utilizes 90 tons per day of hydrogen sulfide to make 75 tons of sulfur. This sulfur is then converted to 215 tons of sulfuric acid.

Sulfuric acid is used in greater volume and has more application than any other industrial chemical. Since sulfuric acid is in short supply, this recovery of an otherwise wasted material is of significance. The 415 tons of sulfuric acid produced daily has a value of over $6,700 at the current minimum market price. In addition to this economic value, the improvement in decreasing sulfur dioxide emission has materially reduced crop damage. The sulfuric acid produced is used mostly in the refining processes.

Of possible future value are the various dusts recovered from iron and non-ferrous foundries and from open-hearth and electric steel furnaces. A spectrographic analysis of dust collected in a bag filter system at an iron foundry shows the following:

Constituents present in large percentages:

silicon
iron
magnesium
calcium
aluminum

Constituents present in minor to extremely small percentages:

manganese
arsenic
osmium
molybdenum
vanadium
copper
zinc
sodium
titanium
silver
zirconium
scandium
potassium
columbium
chromium
tin
boron
gallium